



Investigative interviewing of youth with ADHD – recommendations for detective training

Kimberley J. Cunial^a, Leanne M. Casey^{a,b}, Clare Bell^a and Mark R. Kebbell^a

^a*School of Applied Psychology, Griffith University, Brisbane, QLD, Australia;* ^b*Menzies Health Institute Queensland, Griffith University, Brisbane, QLD, Australia*

Attention deficit hyperactivity disorder (ADHD) in youth can lead to a trajectory of early and repeated contact with the criminal justice system (CJS), where such youth face significant challenges due to the nature of their diagnosis and the lack of specialized detective training in this area. This article reviews Australian detectives' perceptions regarding contact with ADHD-affected youth, ongoing contact of such youth with the CJS, and the impact of ADHD on interviewing time efficiency and quality of information gathered. It explores detectives' perceived impact of ADHD on components of the Cognitive Interview (CI). It overviews detectives' perceptions regarding their own skill/ability, training availability and future training preferences regarding the interviewing of ADHD-affected youth. The authors highlight best practice in specialized detective training, as well as in working with ADHD-affected youth. Recommendations are made regarding the design features of a potential specialized training programme for detectives interviewing ADHD-affected youth.

Key words: ADHD; attention-deficit/hyperactivity disorder; cognitive interview; Child Protection Investigation Unit; detective; forensic; police; recommendations; training; youth.

ADHD-affected youth in forensic settings

Attention-deficit/hyperactivity disorder (ADHD) is a common neurodevelopmental disorder with onset early in childhood and symptoms often persisting through adulthood (Barkley, 1997; Ginsberg, Hirvikoski, & Lindefors, 2010; Ginsberg, Langstrom, Larsson, & Lichtenstein, 2013; McArdle, 2004; Young & Gudjonsson, 2008). ADHD is linked to executive function deficits, which contribute to difficulties with response inhibition, response variability, impulsivity, verbal and non-verbal fluency, working memory, timing-related behaviour, temporal discounting, attention, planning and organization,

emotional regulation, and judgment and decision making (see Barkley, 2015; Bruchmuller, Margraf, & Schneider, 2012; DosReis et al., 2010; Garfield et al., 2012; Thapar & Cooper, 2016). Estimated prevalence rates of ADHD within the general population are 5.29% for youth and 2.5% for adults (Polanczyk, de Lima, Horta, Biederman, & Rohde, 2007; Simon, Czobor, Balint, Meszaros, & Bitter, 2009). However, prevalence rates are much higher in prison populations at 30.1% for youth and 26.2% for adults (Polanczyk et al., 2015; Young, Moss, Sedgwick, Fridman, & Hodgkins, 2015). This suggests a strong rationale for increasing awareness of the impact of ADHD

Correspondence: Kimberley J. Cunial, School of Applied Psychology, Griffith University, Mt Gravatt Campus, Queensland, 4111, Australia. E-mail: kimberley.cunial@griffithuni.edu.au

during the investigative interviewing process as well as how detectives may better recognize and support ADHD-affected youth when they first come into contact with the *criminal justice system* (CJS).

ADHD and criminal justice system (CJS) contact

The executive function deficits in individuals with ADHD make them vulnerable to an early and high rate of contact with CJS, either as a victim/witness or as a suspect with adolescent-onset persistent criminal offending (Buck et al., 2009; Lay, Ihle, Esser, & Schmidt, 2005; W. R. Lindsay et al., 2013; Lynam, 1996; Retz et al., 2004; Young, Adamou, et al., 2011). The earlier the CJS contact, the more likely it persists (DeLisi, Neppl, Lohman, Vaughn, & Shook, 2013; Young, Wells, & Gudjonsson, 2011). Individuals with ADHD represent the most frequent diagnosis in forensic settings, with up to 67% of prisoners retrospectively receiving a diagnosis (Einarsson, Sigurdsson, Gudjonsson, Newton, & Bragason, 2009; Young & Gudjonsson, 2008). Even when controlling for comorbid diagnoses these individuals encounter earlier CJS contact, and they are most likely and fastest to recidivate out of all re-offenders (Buitelaar & Ferdinand, 2013; Collins & White, 2002; Gonzalez, Kallis, & Cold, 2013; Rasmussen, Almik, & Levander, 2001; W. R. Lindsay et al., 2013; W. R. Lindsay et al., 2010; Timimi & Taylor, 2004; Young, Adamou, et al., 2011; Young & Amarasinghe, 2010; Vitelli, 1996). Australian Child Protection Investigation Unit (CPIU) detectives reported frequently encountering youth with ADHD-type behaviour, as well as perceiving such individuals to have high levels of ongoing CJS contact (Cunial & Kebbell, 2017).

Impact of ADHD on investigative interviewing

The best practice guidelines for investigative interviewing in Australia are based on the Cognitive Interview (CI), with its 10 key

components. These include the mnemonic-based components 'Mentally Recreate', 'Report Everything', 'Change Perspective' and 'Change Order'; as well as the social components 'Establish Rapport', 'Transfer Control', 'Use Imagery', 'Encourage Concentration', 'Compatible Questions' and 'Open Non-Leading Questions' (see Abbe & Brandon, 2013; Bensi, Nori, Gambetti, & Giusberti, 2011; Dando, Wilcock, & Milne, 2009; Fisher & Geiselman, 2010; Geiselman & Fisher, 2014; Powell, Fisher, & Wright, 2005; Powell & Guadagno, 2008; Snow & Powell, 2005). Australian CPIU detectives report that ADHD-type behaviours in youth interviewees exert a highly significant negative impact on the interviewing process, with regards to time efficiency and quality of information gathered (Cunial & Kebbell, 2017). ADHD-type behaviours are reported to impact on all components of the CI, but to exert an especially strong impact on those components that would draw most heavily on executive function skills recognized to be challenged in ADHD-affected youth. That is, they perceived ADHD type behaviour in youth interviewees to exert the most significant impact, respectively, on the CI components 'Encourage Concentration', 'Mentally Recreate' and 'Change Order' (Cunial, Casey, Bell, & Kebbell, 2019a). This suggests that additional training may be necessary regarding how ADHD in youth may affect the investigative interviewing process as well as how each of the CI components may be modified to improve outcomes.

Detective training

Specialist 'Tier 3' detective training has been recommended for improving the interviewing process for vulnerable interviewees who are young and/or may suffer with mental health difficulties, intellectual impairment or developmental disabilities (see Darwinkel, Powell, & Tidmarsh, 2013; Henshaw & Thomas, 2012; R. R. Lindsay & Taylor, 2018; Scott,

Tudor-Owen, Pedretti, & Bull, 2015; Spivak & Thomas, 2013; Westcott & Kynan, 2006). 'Tier 3' is training designed to prepare detectives for dealing with more serious and complex crimes. It is specialized training, aimed at preparing detectives in the use of advanced interviews such as with major crimes and with vulnerable witnesses (see Green, 2012).

Detective training needs regarding interviewing of ADHD-affected youth

Although specialized training regarding developmentally appropriate interviewing of ADHD-affected youth has been recommended (Cederborg, Alm, Nises, & Lamb, 2013; Hill & Moston, 2011; Young, Adamou, et al., 2011), there appears to be a paucity of research regarding guidelines for the development of specialized detective training in this area. In view of the high number of ADHD-affected youth coming into repeated contact with the CJS, and their ADHD-related difficulties exerting a highly significant impact on the CI as well as on the time efficiency and quality of information gathered throughout the process (see Cunial, Casey, Bell, & Kebbell, 2019a; Cunial & Kebbell, 2017), the absence of guidelines/training is concerning. Of additional concern is the fact that detectives have reported having only a moderate ability to recognize ADHD in interviewees and how it may impact the interviewing process, as well as just average confidence in how to conduct a modified cognitive interview with ADHD-affected youth. Furthermore, CPIU detectives reported a below-average satisfaction with prior training as well as below-average confidence in their ability to access future training in this area. Detectives also reported a high desire for a new training programme focused on interviewing youth with ADHD (see Cunial, Casey, Bell, & Kebbell, 2019b). Without adequate training, low confidence and skill in this area exert a negative impact on officers' ability to correctly use all components of the CI with youth (Wheatcroft, Wagstaff, & Russell, 2014). This holds implications that include

inappropriate questioning, miscarriages of justice and reduced confidence in the public making police contact (Collins & White, 2002; Green, 2012; Griffiths & Milne, 2010; Griffiths, Milne, & Cherryman, 2011; Hill & Moston, 2011; Kebbell, Hatton, & Johnson, 2004; Read, Powell, Kebbell, & Mine, 2009; Snook, House, MacDonald, & Eastwood, 2012).

High-quality training would address detectives' gap in knowledge and skill regarding the interviewing of ADHD-affected youth. Effectively scaffolding detectives' knowledge and skill in such a specialized area would require careful consideration of good training pedagogy, by overcoming barriers and aligning with police preferences (Lamb, La Rooy, & Malloy, 2011; Read & Powell, 2011). Overcoming barriers includes making training cost effective; building in 'coaching' methods; utilizing university research on evidence-based practice; drawing on real-life experiences; incorporating practical problem-solving learning exercises; teaching proactive strategies; adopting meaningful and clearly defined learning objectives; considering contextual factors; utilizing a buddy system with self-monitoring and evaluation as well as peer supervision, support and feedback/review; spacing training sessions over time in order to augment recency and primacy effects; shifting the way police view their role in the system and the value of psychological contributions to the field; and creating a learning environment that is mutually supportive of multiple stakeholders' viewpoints (Adams, Field, & Verhave, 1999; Benson & Powell, 2015a, 2015b; Cederborg, Alm, Nises, & Lamb, 2013; Crane, Maras, Hawken, Mulcahy, & Memon, 2016; Darwinkel et al., 2013; Griffiths & Milne, 2010; Griffiths et al., 2011; Heidt, Arbuthnott, & Price, 2016; Herrington & Pope, 2014; Lamb et al., 2011; Lamb, Sternberg, Orbach, Esplin, & Mitchell, 2002; Lexton, Smith, Olufemi, & Poole, 2005; Lyon & Saywitz, 2006; Memon, Bull, & Smith, 1995; Milne & Bull, 2001; Mugford, Corey, & Bennell, 2013;

O'Mahony, Smith, & Milne, 2011; Orbach et al., 2000; Paterson, 2011; Powell & Wright, 2008; Price & Roberts, 2011; Sharman, Hughes-Scholes, Powell, & Guadagno, 2012; Smets & Pauwels, 2010; Snook et al., 2012; Tyler & McKenzie, 2011; Van Hasselt, Romano, & Vecchi, 2008; Wright & Powell, 2007). It is also important to examine how such training pedagogy can best align with police preferences. A recent study of 102 Australian detectives examined training modality preferences. The results showed a significantly higher preference for online learning, closely followed by workshops and role plays, than for alternatives that included a DVD with accompanying manual, or a buddy system with peer reviews (see Cunial, Casey, Bell, & Kebbell, 2019b). This is consistent with recent technological advances seeing e-learning emerge as a popular modality for detective training (Benson & Powell, 2015a, 2015b; Brubacher, Powell, Skouteris, & Guadagno, 2015; Powell, Guadagno, & Benson, 2016).

Best practice regarding ADHD-affected youth

Currently, the literature does not appear to provide best practice recommendations for dealing with youth with ADHD in forensic settings. Yet it may be possible to draw upon the breadth of recommendations that have been aimed at helping parents and schools to support youth with ADHD. This primarily involves implementing a range of recommended evidence-based accommodations and adjustments to manage the executive function deficits and emotional regulation difficulties associated with the diagnosis, as well as implementing processes to screen and identify such youth as promptly as possible, as well as to engage early intervention services.

Accommodations and adjustments for supporting youth with ADHD

A range of accommodations and adjustments are recommended for supporting youth with

ADHD, which specifically target the functional impairments compromised by the diagnosis (see Daley et al., 2018; Efron, 2018; Fabiano & Pyle, 2019; Moore et al., 2018; Rasmussen et al., 2019; Tarakcioglu, Gokler, Kadak, Memik, & Aksoy, 2019; Wilkes-Gillan, Bundy, Cordier, Lincoln, & Chen, 2016). Specifically, the areas most affected by ADHD include working memory; attention and focus; organization, planning and decision making; impulse control; motivation; self-awareness; and emotional regulation. Table 1 presents a range of accommodations and adjustments across each of these areas.

Linking research to theory for detective training recommendations

When interviewing individuals with a vulnerability such as ADHD there is a need for high interviewer skill (Hill & Moston, 2011; Milne & Bull, 2001). Powell (2013) identifies 'quality of training' as one of the main barriers to the effective use of the Cognitive Interview. Thus training modality and content for detectives needs to be well considered. There appears to be a lack of research in this area at present. As discussed previously, Australian detectives have reported a below-average satisfaction with the ability of prior training to equip them in this area as well as a moderately high desire for a new training programme focused on interviewing youth with ADHD (Cunial, Casey, Bell, & Kebbell, 2019b).

Detective training modality

Training modality is an important pedagogical consideration in order to most effectively engage detectives in learning. This requires aligning with detectives' preferences as well as drawing on best practice in the field, based on the aforementioned features discussed in the literature. Thus a proposed training programme would involve detectives completing a set of online modules in their own time as convenient, with follow-up workshops. It is recommended that the online modules be

Table 1. Accommodations and adjustments for supporting youth with ADHD.

Areas of difficulty	Accommodations and adjustments	Sources
Working memory	Prioritizing tasks; communicating effectively with short direct instructions and simple sentences; repeating instructions; breaking instructions into small simple steps; having the child/adolescent repeat or paraphrase; allowing extra time; being selective in what the child/adolescent must remember; using signals when something is particularly important; employing prompts and cues; making eye contact; providing feedback; encouraging 'think aloud' techniques; minimizing task load.	Barkley, 2013a, 2013b, 2013c, 2016; Cooney, 2010; Pachman & Ke, 2011; Spiel et al., 2014; Teeter, 2000.
Attention and focus	Introducing stimulation and novelty; using colour, noise control, auditory signals, pleasant/fun experiences, opportunities to physically move and to keep hands busy (i.e. doodling); fatigue awareness; modified task characteristics; eye contact and multisensory strategies while giving instructions; physical cueing; an enthusiastic voice with a clear quick pace and varied inflection; reminders; humour; visual aids and props; demonstrations; emphasis on key words/phrases; speaking in simple sentences; questioning techniques that encourage thinking/reasoning; multiple methods for responding (oral, written, drawing, role play with figures, etc.); maintaining close proximity to the child/adolescent; routine and organizational assistance.	Barkley, 2016; Cooney, 2010; Parker, 2006; Rief, 2015; Teeter, 2000.
Organization, planning and decision making	Visual timers; tasks broken into small chunks; check lists; a methodical and systematic approach.	Barkley, 2016; Goldrich, 2015; Spiel et al., 2014; Teeter, 2000.
Impulse control	Modelling delayed responding; taking time to consider responses; remaining calm; minimizing items/objects that may encourage impulsivity; offering choices; showing empathy; utilizing 'wait/stop, think go'; psycho-education; taking a less formal approach where possible.	Barkley, 2013c, 2016; Cooney, 2010; Goldrich, 2015; Weisner et al., 2018.
Motivation	Increased positive self-talk; external verbal and non-verbal expressions of approval/praise; highly specific feedback about the desired behaviours; positive attention; token economy reward system; reinforcement in very short intervals with high frequency and delivered immediately after the desired behaviour occurs; changed/rotated content to combat satiation/habituation.	Barkley, 2008, 2013c, 2016; Dekkers et al., 2017; Pelham & Fabiano, 2008; Rief, 2015; Smith & Langberg, 2018; Teeter, 2000.
Self-awareness	Self-rating/monitoring cards; timers; taped time signals; non-verbal cues; concretely defining the rules/procedures/expectations with the child/adolescent; having the child/adolescent repeat back content/instructions/questions.	Barkley, 2008, 2013c; Geissler et al., 2018; Luderer et al., 2019; Rief, 2015.
Emotional regulation	Offering encouragement and positive feedback; using humour; focusing only on what is important; limiting choices; creating a positive environment; setting realistic expectations; using a slower pace; avoiding reactive responses; remaining calm; flexibility; allowing low lighting for calmness; ignoring minor inappropriate behaviour; flexible seating options; 'when/then' statements for transitions; self-soothing techniques; modelling positive emotions, patience, positive regard, kindness, tolerance and respectful language/tone/body-language.	Barkley, 2013c, 2016; Cooney, 2010; Goldrich, 2015; Parker, 2006; Pfiffner & DuPaul, 2015; Rief, 2015.

Note: ADHD = attention-deficit/hyperactivity disorder.

spaced apart, with built in competency assessments required before progressing from one module to another. Competency assessments should draw on research and include practical problem-solving exercises. Each module should begin with clearly defined learning objectives that are relevant and meaningful to detectives' roles. The follow-up workshops are advised to be run in a supportive and respectful environment, with involvement from multi-disciplinary stakeholders who can work with detectives regarding how to improve outcomes for identified ADHD-affected youth. The workshops should also include coaching and role plays, drawing on real-life experiences.

Training content

ADHD awareness

While ever there is a lack of awareness about ADHD, the stigma and negative outcomes may persist for affected youth (Kooij et al., 2019; Mueller, Fuermaier, Koerts, & Tucha, 2012). A lack of awareness regarding this condition is highly predictive of recidivism (Philipp-Wiegmann et al., 2018). Furthermore, as discussed previously, Australian detectives have reported just a moderate ability to recognize youth interviewees with ADHD, and this highlights the need for training in the area of ADHD awareness (Cunial, Casey, Bell, & Kebbell, 2019b). It is important to increase awareness not only of ADHD but also of the propensity for some ADHD-affected youth to develop compensatory strategies that can mask the diagnosis, thus making recognition more challenging (see Rommelse et al., 2016). A detective training programme aimed at increasing awareness of ADHD should cover important elements such as presentation and diagnostic features, vulnerabilities that may contribute to a miscarriage of justice, how the disorder may impact the investigative interviewing process, recommended accommodations and adjustments for the CI, and screening/identification and early intervention procedures.

Impact of ADHD on the interviewing process

Detectives have reported just a moderate understanding of how ADHD may impact upon the interviewing process (Cunial, Casey, Bell, & Kebbell, 2019). It may be helpful for a training programme to provide comprehensive information regarding the fact that ADHD in youth interviewees is perceived by detectives to exert a significant impact on the time efficiency, quality of information gathered and efficacy of all CI components during the investigative interviewing process (Cunial, Casey, Bell, & Kebbell, 2019a; Cunial & Kebbell, 2017).

CI accommodations regarding ADHD-affected youth

The literature has touched on some potential positive accommodations that may be well matched to youth with ADHD within forensic settings, in order to address issues with memory, impulsivity, attention, self-regulation, hyperactivity/restlessness and emotional lability. These include regular breaks, short simple sentences with concepts broken down, repetition of important information, additional time to think, less rushed and forceful, being respectful/kind/listening, props, visual cues, use of concrete objects particularly to show the passing of time, frequent 'checking' for understanding and focus, small frequent rewards for effort and motivation, use of external devices to offload memory demands, frequently changing task, more social and physical than mental tasks, and so forth (Goldstein, 1997; Gudjonsson & Young, 2006; Nield, Milne, Bull, & Marlow, 2003; Read & Powell, 2011; Watson, Angell, Morabito, & Robinson, 2008). However, there appears to be a lack of research that specifically addresses accommodations for ADHD-affected youth in forensic settings. Of particular relevance is the apparent absence of research addressing accommodations for the investigative interviewing process. Furthermore, Australian detectives have

reported below average confidence in their ability to conduct a modified CI for ADHD-affected youth. Based on best practice accommodations and adjustments already discussed. Based on these findings, a number of recommendations may be considered for each of the CI components, including Encourage Concentration, Mentally Recreate, Change Order, Report Everything, Change Perspective, Use Imagery, Transfer Control, Establish Rapport, Open/Non-Leading Questions, and Compatible Questions. Of particular relevance are those components of the Cognitive Interview found to be most affected by ADHD, as highlighted by Cunial, Casey, Bell, and Kebbell (2019a). These components include components 'Encourage Concentration', 'Mentally Recreate' and 'Change Order'. Potential accommodations and adjustments for the CI components are discussed below.

CI components based on mnemonics

Four CI components that are based heavily on mnemonics include 'Mentally Recreate', 'Change Perspective', 'Change Order' and 'Report Everything'. This relates to Tulving and Thomson's (1973) encoding specificity principle of memory, which emphasizes manipulation of contextual factors at the time of encoding so as to improve retrieval. Therefore, accommodations and adjustments that target working memory, organization, planning and decision making are recommended.

The best practice accommodations and adjustments recommended for these executive function skills in ADHD-affected youth may include adopting a systematic approach to the interviewing process; communicating with clear simple sentences and short instructions/questions; maintaining eye contact; encouraging the interviewee to repeat/paraphrase questions and instructions; repeating instructions; prioritizing interviewing tasks; breaking instructions and tasks into small simple steps, using checklists and visual timers for task

completion; allowing extra time, being selective in what instructions and information the interviewee must remember in order to minimize cognitive load and avoid overtaxing working memory; using signals, prompts and cues for key points in the interview; providing feedback; and encouraging think aloud techniques (see Barkley, 2013c, 2016; Cooney, 2010; Goldrich, 2015; Kim, Liu, Glizer, Tannock, & Woltering, 2014; Pachman & Ke, 2011; Spiel, Evans, & Langberg, 2014; Teeter, 2000; Weigard & Huang-Pollock, 2017). These accommodations are particularly salient for the CI components 'Mentally Recreate' and 'Change Order', which detectives have rated as being particularly challenging with ADHD-affected youth.

These two CI components additionally need the interviewee to demonstrate freedom from distractibility/impulsivity in order to mentally manipulate their reinstatement and temporal ordering of facts during the interview. Thus best practice accommodations previously highlighted for managing impulsivity may be beneficial. These include the detective/s modelling to the interviewee how to stay calm, as well as how to take time to consider information and delay responses. This may involve targeted techniques such as 'wait/stop, think go'. Additional strategies include conducting the interview in a less formal space/manner and minimizing items/objects in the environment space that may incite impulsivity. Offering choices and showing empathy are also recommended (Barkley, 2013c, 2016; Cooney, 2010; Goldrich, 2015).

Regarding the CI component 'Mentally Recreate' in particular, which detectives rate as especially impacted by ADHD, some authors have proposed an accommodation in forensic settings using the 'Sketch Method'. Whilst not yet researched with ADHD-affected youth, this technique may be considered well suited to this cohort. The technique involves the interviewee drawing their experience and using that sketch to then describe the events using their own retrieval cues. This method offers the

advantages of simplifying the context, minimizing interviewer inference, maximizing time efficiency whilst also allowing the interviewee to set the pace, reducing the propensity for false information provided impulsively, and lessening the load on working memory (Dando, Wilcock, Behnkle, & Milne, 2011; Dando, Wilcock, & Milne, 2009).

CI components based on social and communication aspects

CI components aimed at facilitating positive interactions and effective communication include 'Encourage Concentration', 'Establish Rapport', 'Transfer Control', 'Use Imagery', 'Open/Non-Leading Questions' and 'Compatible Questions'. Youth interviewees with ADHD may benefit from accommodations and adjustments based on their known difficulties with attention and focus, emotional regulation, self-awareness and motivation. This is particularly important for the CI component 'Encourage Concentration', with detectives reporting this component to be the most significantly impacted by ADHD-type behaviour in the interviewing process. Based on best practice recommendations for working with ADHD-affected youth, it may be helpful for detectives to modify their interviewing to improve focus and attention by including stimulation and novelty (i.e. colour, noise control, auditory signals, pleasant/fun experiences, opportunities to physically move and to keep hands busy, etc.); modified task characteristics; eye contact and multisensory strategies during questions/instructions; physical cueing, an enthusiastic voice with a clear quick pace and varied inflection; reminders; humour; visual aids and props; demonstrations, emphasis on key words/phrases; use of simple sentences; questioning techniques that encourage thinking/reasoning; multiple methods for responding (oral, written, drawing, role play with figures, etc.); close proximity to the interviewee, as well as routine and organizational

assistance (see Barkley, 2016; Cooney, 2010; Parker, 2006; Rief, 2015; Teeter, 2000).

The CI components 'Establish Rapport' and 'Transfer Control' require supports for ADHD-affected youth, whose disorder makes them struggle with self-awareness, self-regulation and motivation. Thus the suggested best practice accommodations may include offering encouragement and positive feedback, using humour, focusing only on what is important with limited choices, creating a positive environment, setting realistic expectations with a slower pace, avoiding reactive responses, remaining calm and flexible, allowing low lighting for calmness, ignoring minor inappropriate behaviour, providing flexible seating options, using when/then statements for transitions, encouraging self-soothing techniques, and modelling positive emotions, patience, positive regard, kindness, tolerance and respectful language/tone/body-language. Increased self-awareness may be facilitated by using strategies such as self-rating/monitoring cards, in conjunction with timers, taped time signals, non-verbal cues and defining concretely the rules/procedures/expectations with the child/adolescent repeating them back to the interviewer before commencing (see Barkley, 2008, 2013c, 2016; Cooney, 2010; Dekkers et al., 2017; Goldrich, 2015; Parker, 2006; Pelham & Fabiano, 2008; Pffiffer & DuPaul, 2015; Rief, 2015; Smith & Langberg, 2018; Teeter, 2000).

The CI components 'Open/Non-Leading Questions' and 'Compatible Questions' require the same supports as those covered above, in addition to those that assist with impulse control so as to minimize potential for false information/confessions and 'don't know' answers. Strategies to support impulse control may include modelling delayed responding, taking time to consider responses, remaining calm and minimizing items/objects that may encourage impulsivity, offering choices, showing empathy, utilizing 'wait/stop, think go' and taking a less formal

approach where possible (Barkley, 2013c, 2016; Cooney, 2010; Goldrich, 2015).

Proactive measures for breaking the cycle of ongoing CJS contact

Proactive measures for screening/identifying ADHD-affected youth and linking them to early intervention services can break the cycle of ongoing CJS contact. Screening supports early identification, which is linked to improved outcomes in forensic settings (see Quigley & Gavin, 2018; Telford et al., 2013). Experienced police have also emphasized the importance of early identification and intervention regarding ADHD as a key to crime prevention. Authors have suggested screening initiatives be investigated as a matter of routine for police, including asking whether there has ever been a diagnosis (Cohn, Domburgh, Vermeiren, Geluk, & Doreleijers, 2012; Gudjonsson, Sigurdsson, Sigfusdottir, & Young, 2012; Young, Goodwin, Sedgwick, & Gudjonsson, 2013). Screens have been identified as more effective than structured interviews (Young et al., 2013), but consideration needs to be given to the ‘user requirement’ of the test and the qualifications of the administrator (Hayes, 2002). Importantly, collaboration between stakeholders is key in the identification process (Ogg et al., 2013; Young et al., 2018). Identification of potential ADHD within the CJS may best occur with an initial short screen completed by staff, followed by a secondary more comprehensive screen completed by a clinician (Young et al., 2018). An initial screen may include identifying key features of the disorder, as outlined in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013), using a purpose-built scale for detectives to complete before interviewing children and adolescents. Such a scale would need to be validated through test–retest procedures. It is suggested that if interviewees meet criteria for suspected ADHD then the interviewing style be modified to include suitable

accommodations and adjustments, and that the interviewee be referred to collaborating specialist services for clinical assessment and early intervention. In Australia, such services may be provided by school psychologists, child and adolescent community mental health services, indigenous health services and private sector organizations that may collaborate with the CJS.

Conclusions

Summary

Research regarding children and adolescents with ADHD in forensic settings has established that Australian detectives perceive such youth to frequently come into contact with the CJS, for this contact to be repeated and for the executive functions associated with the disorder to significantly impede time efficiency and quality of information gathered in the investigative interviewing process (Cunial & Kebbell, 2017). Specifically, Australian detectives reported perceiving ADHD-type behaviour to exert a significant impact on all CI components and especially ‘Encourage Concentration’, ‘Mentally Recreate’ and ‘Change Order’ (Cunial, Casey, Bell, & Kebbell, 2019a). The detectives also reported only a moderate confidence in their ability to recognize ADHD in youth interviewees, how the disorder may impact the interviewing process and how to conduct a modified cognitive interview with these youths. They further reported below-average satisfaction with previously provided as well as potentially available training regarding the interviewing of youth with ADHD, and a strong desire for a training programme to be developed in this area. Regarding a future training programme, detectives have reported a preference for an online learning platform, closely followed by workshops with role plays (Cunial, Casey, Bell, & Kebbell, 2019a). Suggestions for a proposed training programme have been made, which draw on best practice in training pedagogy to overcome known barriers.

Training content has been proposed, which addresses increased awareness of ADHD in youth interviewees, a range of evidence-based accommodations and adjustments recommended to parents and educators of ADHD-affected youth, and proactive measures for screening and early intervention. It is hoped that these recommendations may inform the development of a new training programme that can be validated in the field.

Implications

There are profound implications regarding the discussed research findings and recommendations regarding a potential training programme that may bring together evidence-based measures for supporting ADHD-affected youth as well as empirical findings regarding Australian detectives' perceptions of ADHD-affected youth in forensic settings and especially the CI. Detectives may be afforded an improved confidence in their ability to interview ADHD-affected youth, with effectively modified interviewing techniques. This may serve to prevent them from steering away from best practice. In doing so, miscarriages of justice may be averted. There is potential to break the ongoing cycle of contact with the CJS. Breaking this cycle by the most effective means involves early identification and intervention, which can change the trajectory of ADHD-affected youth and protect against the host of negative life outcomes documented in the literature (Groman & Barzman, 2014).

Future research

It is hoped that future research will establish empirical evidence for clinical recommendations regarding how detectives may better recognize and accommodate youth with ADHD during the investigative interviewing process. This would involve establishing and validating a detective training programme, based on the guidelines discussed in this article. It would also involve validating a purpose-built early screening measure and establishing protocols

for multidisciplinary collaboration in early intervention referrals. Given the identified high rate of ADHD-affected youth repeatedly coming into contact with the CJS, as well as the significant impact on the CI and the negative trajectory of outcomes, there is a strong rationale for filling the gap in this paucity of research. Most importantly, there is a strong rationale for such research to be applied to police practice, in order to affect change. With increased awareness of ADHD in youth interviewees, as well as skill and confidence in how to recognize and accommodate such youth in the investigative interviewing process, detectives may be able to play a pivotal role in breaking the cycle of ongoing CJS contact and ultimately improve outcomes for children and adolescents with ADHD in forensic settings. Until further research and practical training are invested in this area, youth with ADHD will continue to be disadvantaged in forensic settings.

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Ethical standards

Declaration of conflicts of interest

Kimberley J. Cunial has declared no conflicts of interest.

Leanne M. Casey has declared no conflicts of interest.

Clare Bell has declared no conflicts of interest.

Mark R. Kebbell has declared no conflicts of interest.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study

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